

Claims

[c1]

Sub A

1. A structure for intensifying tracking signals from an optical disk, at least comprising:
a substrate;
a dye material layer over the substrate;
an optical correction layer over the dye material layer; and
a reflection layer over the optical correction layer,
wherein the optical correction layer between the dye material layer and the reflection layer is a layer for improving tracking signals from the optical disk.

[c2]

2. The structure of claim 1, wherein the optical disk includes a recordable digital versatile disk (DVD-R).

[c3]

3. The structure of claim 1, wherein the optical correction layer is a transparent or a semi-transparent layer.

[c4]

4. The optical correction layer of claim 3, wherein material constituting the transparent or semi-transparent layer is selected from a group of inorganic compound consisting of metal, silicon and oxygen, nitrogen, sulfur and carbon.

[c5]

5. The structure of claim 1, wherein the optical correction layer is formed in a sputtering process.

[c6]

6. The structure of claim 1, wherein maximum absorption of light by the dye occurs at a wavelength between 500 ~ 650nm.

[c7]

7. The structure of claim 1, wherein optical correction layer has a thickness between 10 Å to 1000 Å .

[c8]

8. The structure of claim 1, wherein the optical correction layer has a thickness between 30 Å to 300 Å .

[c9]

9. The structure of claim 1, wherein material constituting the reflection layer is selected from a group consisting of gold, silver, aluminum and an alloy thereof.

[c10]

10. A method of manufacturing a recordable digital versatile disk (DVD-R), comprising the steps of:

forming a substrate by injection molding;
forming a dye material layer over the substrate by spin-coating;
forming an optical correction layer over the dye material layer by sputtering;
and
forming a reflection layer over the optical correction layer by sputtering so that
the optical disk has sufficient reflectivity,
wherein the optical correction layer is a transparent or semi-transparent made
from inorganic material.

- [c11] 11. The method of manufacturing DVD-R of claim 10, wherein maximum absorption of light by the dye within the dye material layer occurs at a wavelength between 500 ~ 650nm.
- [c12] 12. The method of manufacturing DVD-R of claim 10, wherein the optical correction layer has a thickness between 10 Å to 1000 Å .
- [c13] 13. The method of manufacturing DVD-R of claim 10, wherein the optical correction layer has a thickness between 30 Å to 300 Å .
- [c14] 14. The method of manufacturing DVD-R of claim 10, wherein material constituting the inorganic optical correction layer is selected from a group of inorganic compound consisting of metal, silicon and oxygen, nitrogen, sulfur and carbon.
- [c15] 15. The method of manufacturing DVD-R of claim 10, wherein material constituting the reflection layer is selected from a group consisting of gold, silver, aluminum and an alloy thereof.

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